

**IN THE CLAIMS**

Claims 1-12. (Cancelled)

- Claim 13. (New) A method for increasing leptin levels in a subject in need of improved immune function, skin epitheliation, hair follicle cycling, or inhibition of tumor formation, comprising administering to said subject an amount of nicotinic alkyl ester sufficient to increase leptin levels in said subject and improve immune function, improve skin epitheliation, improve hair follicle cycling, or inhibit tumor formation, wherein the alkyl chain of said nicotinic acid alkyl ester contains from 8 to 22 carbon atoms.
- Claim 14. (New) The method of claim 13, wherein said subject is in need of improved immune function.
- Claim 15. (New) the method of claim 13, wherein said subject is in need of improved skin epitheliation.
- Claim 16. (New) The method of claim 13, wherein said subject is in need of improved hair follicle cycling.
- Claim 17. (New) The method of claim 13, wherein said subject is in need of inhibition of tumor formation.
- Claim 18. (New) The method of claim 13, wherein said alkyl chain contains 12 or 14 carbon atoms.
- Claim 19. (New) The method of claim 13, wherein said nicotinic acid alkyl ester is administered orally.
- Claim 20. (New) The method of claim 13, wherein said nicotinic acid alkyl ester is administered topically.

Claim 21. (New) The method of claim 13, comprising administering more than one nicotinic acid alkyl ester.